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(54) Title: METHOD FOR PREPARING OLIGONUCLEOTIDES

(57) Abstract: A method for preparing an oligonucleotide comprising the steps of a) providing a 3'-protected compound having the formula: wherein B is a heterocyclic base, R<sup>2</sup> is H, a protected 2'-hydroxyl group, F, a protected amino group, an O-alkyl group, an O-substituted alkyl, a substituted alkylamino or a C4'-O2'-methylene linkage, R<sup>3</sup> is OR<sup>3</sup>, NHR<sup>3</sup>, NR<sup>3</sup>, a 3'-protected nucleotide or a 3'-protected oligonucleotide, R<sup>3</sup> is a hydroxyl protecting group, R<sup>3</sup>, R<sup>3</sup> are independently an amine protecting group, b) reacting said compound with a nucleotide derivative having a 5'-protection group in the presence of a solid supported activator to give an elongated oligonucleotide with a P(III)-internucleotide bond, c) optionally processing the elongated oligonucleotide with a P(III)-internucleotide bond by either or both of steps c1) and c2) in any sequence, c1) capping preferably by reacting with a solid supported capping agent, c2) oxidizing preferably by reacting the oligonucleotide with a solid supported oxidizing reagent, d) removing the 5'-protection group.